



NORTH AMERICAN AEROSPACE DEFENSE COMMAND

OFFICE OF THE INSPECTOR GENERAL

CROSSTELL DOCUMENT
FOR
NORAD EVALUATIONS
CY99

February 2000

MEMORANDUM FOR North American Aerospace Defense (NORAD)
Customers

FROM: HQ NORAD/IG

125 East Ent Ave

Peterson AFB, CO 80914-1283

SUBJECT: NORAD/IG Crosstell Document

1. The attached document is an overview of eight Alert Force Evaluation (AFE) fighter unit reports; three AFE Air Defense Sector (or equivalent) reports; and one Region Air Operations Center (RAOC) - NORAD Operational Evaluation (NOE) report. This overview is intended to provide feedback to the NORAD operational community. Ratings of outstanding, marginal, and unsatisfactory are highlighted. This overview covers calendar year 1999.

- **Best Practices** are ideas or practices worthy of command-wide attention. They are identified in this document in the specific area the idea or practice is being utilized.

- **Findings** are core problems that need to be reviewed by the HQ NORAD Staff and they are also identified in this document in the specific area the problem occurred.

2. The IG's goal is to facilitate the commander's ability to determine top performance and ultimately to strengthen combat capability. We welcome your comments. Feel free to contact the NORAD IGI, DSN 834-6364.

GEORGE WAGASKY III, Colonel, USAF
Inspector General

NORAD INSPECTOR GENERAL EVALUATION CROSSTELL

This document is an analysis of evaluations conducted by the NORAD/IG on NORAD assigned units during calendar year 1999. The database is comprised of eight AFEs of fighter unit alert forces and three AFEs of Air Defense Sectors (ADSs) or equivalent. Also, one RAOC NOE was conducted.

The standard five-tier rating system was used. Fighter "Initial Response" ratings were changed to either "Pass" or "Fail." This change is reflected in the revised NI90-3, dated September 1998.

RATING DEFINITIONS

OUTSTANDING (OUT): Performance or operation far exceeds mission requirements. Procedures and activities are carried out in a far superior manner. Resources and programs are very efficiently managed and are of exceptional merit. Few, if any, deficiencies exist.

EXCELLENT (EXC): Performance or operation exceeds mission requirements. Procedures and activities are carried out in a superior manner. Resources and programs are very efficiently managed and relatively free of deficiencies.

SATISFACTORY (SAT): Performance or operation meets mission requirements. Procedures and activities are carried out in an effective and competent manner. Resources and programs are efficiently managed. Minor deficiencies may exist but do not impede or limit mission accomplishment.

MARGINAL (MAR): Performance or operation does not meet some mission requirements. Procedures and activities are not carried out in an efficient manner. Resources and programs are not efficiently managed. Deficiencies exist that impede or limit mission accomplishment.

UNSATISFACTORY (UNS): Performance or operation does not meet mission requirements. Procedures and activities are not carried out in an adequate manner. Resources and programs are not adequately managed. Significant deficiencies exist that preclude or seriously limit mission accomplishment.

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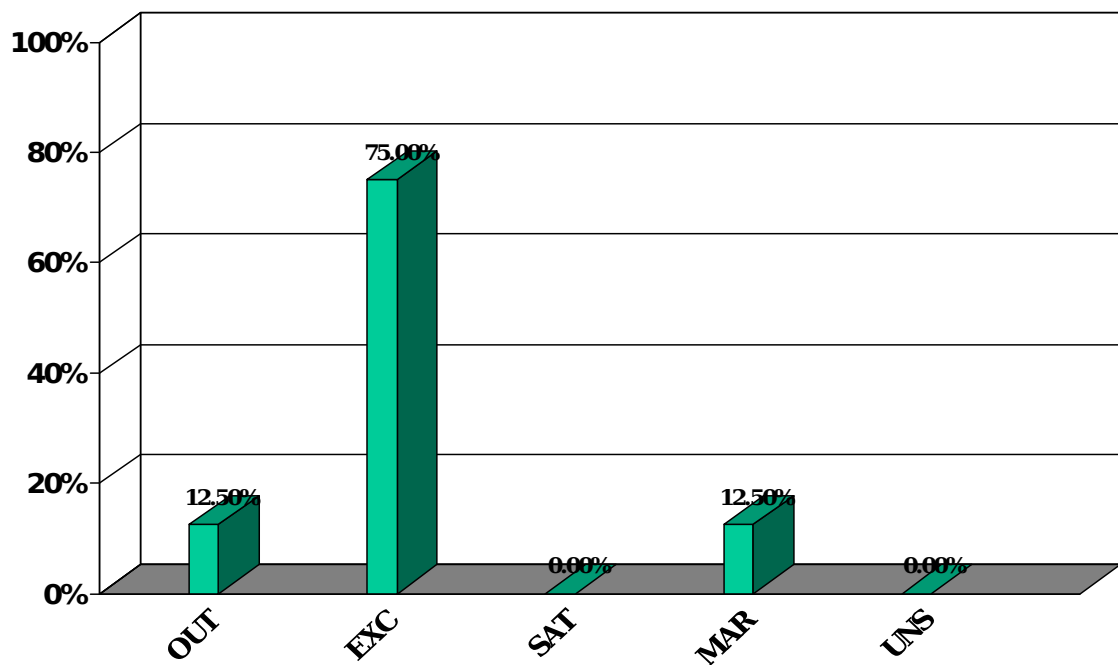
2.1. Overview: Area of Interest

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Section A - Alert Force Evaluations (AFEs) (Fighters)

1.0. Fighter Ratings - Overall. This rating distribution chart and similarly formatted ones depict percentages of units receiving each grade. These percentages were based on 8 AFEs. One unit was rated outstanding; six units were rated excellent; and one unit was rated marginal.

OVERALL FIGHTER RATINGS

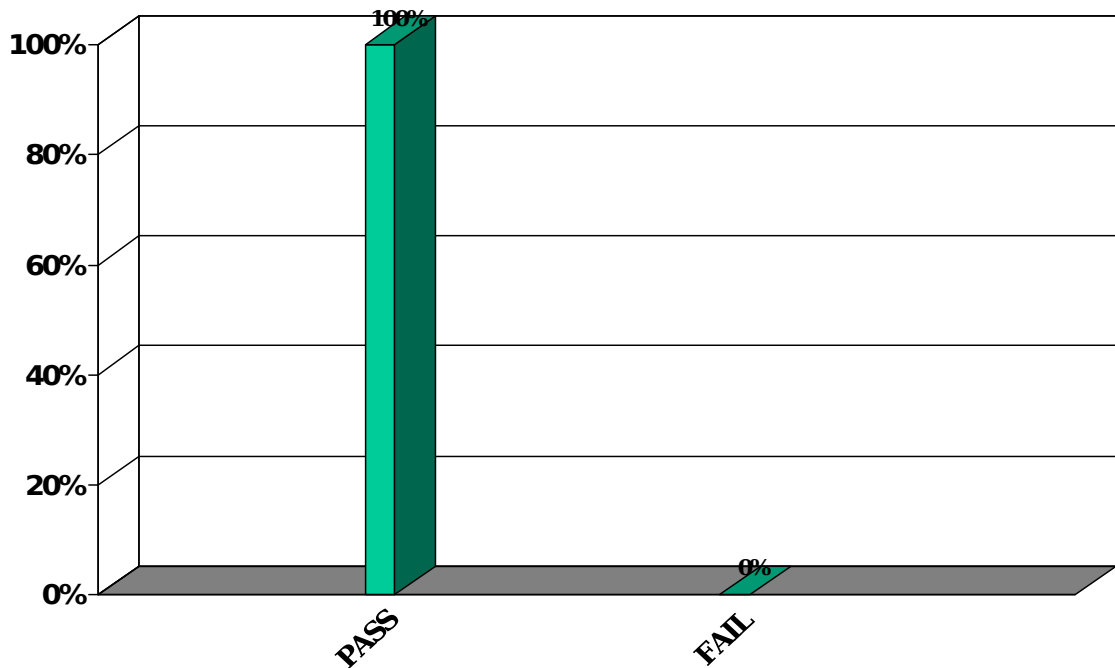


Outstanding/Marginal Ratings: Remarks for the outstanding/marginal unit ratings are highlighted in the specific major areas and sub-areas.

2.0. Fighter Initial Response - Overall.

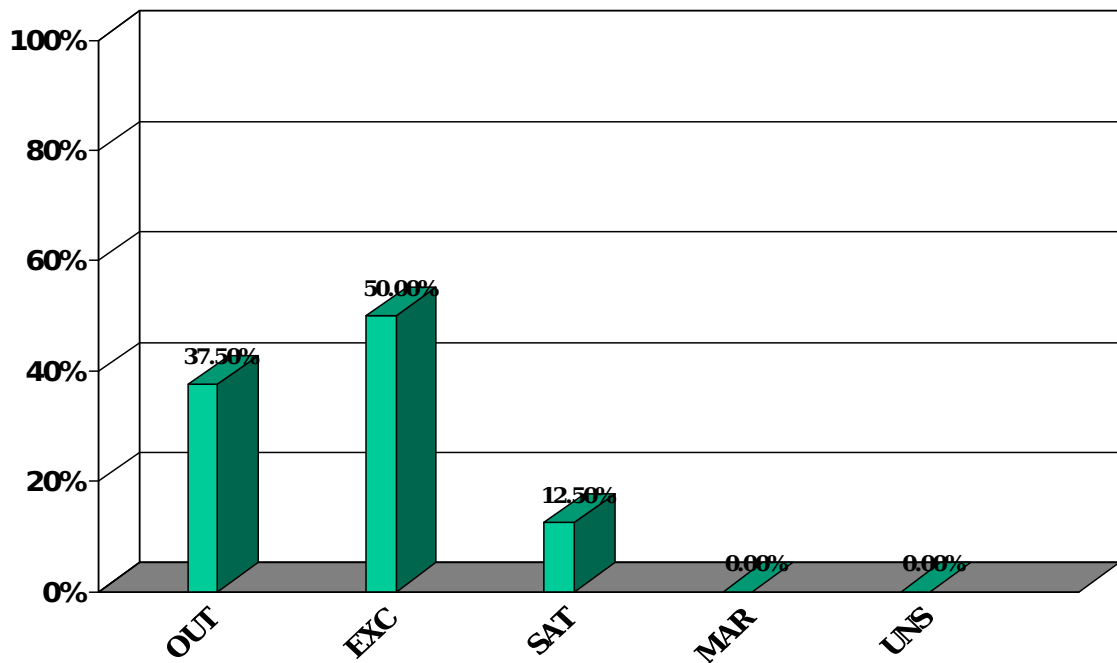
These percentages were based on 8 AFEs. Initial Response ratings were changed in 1998 from Satisfactory or Unsatisfactory to either Pass or Fail.

FIGHTER INITIAL RESPONSE



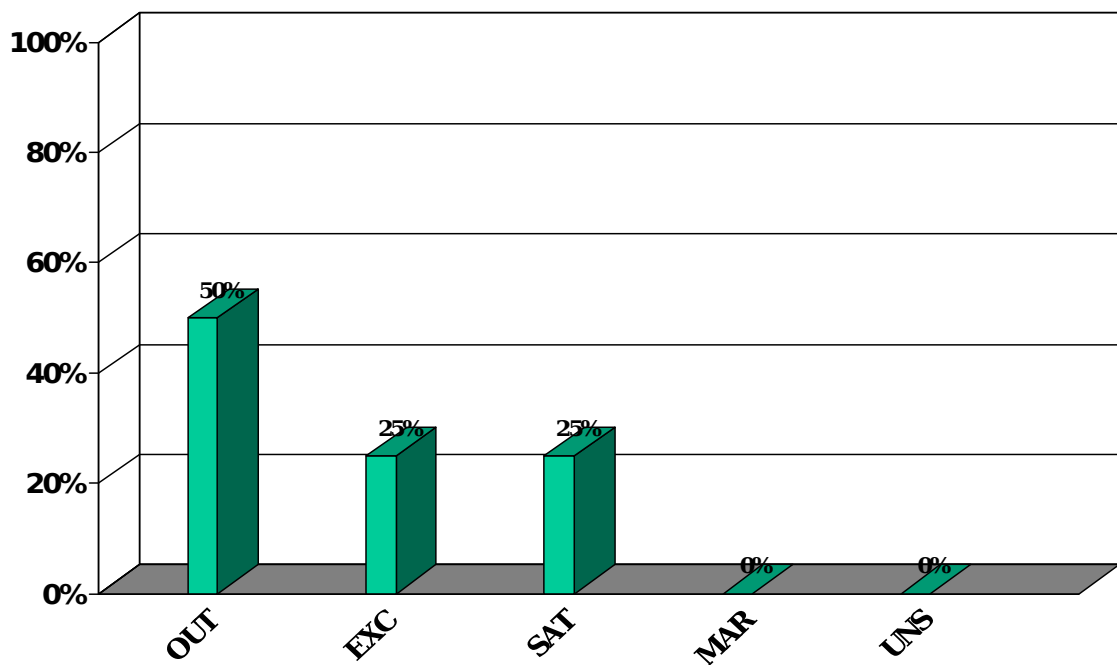
3.0. Fighter Command and Control - Overall. These percentages were based on 8 AFEs. Three units were rated outstanding; four units were rated excellent; and one unit was rated satisfactory. Highlights for the outstanding ratings in this major area are discussed in the specific sub-areas.

FIGHTER COMMAND & CONTROL



3.1. Fighter Command Post. These percentages were based on 4 AFEs. Command Posts not assigned to the evaluated unit, but supporting NORAD peacetime alert missions were evaluated, but not rated. Two units were rated outstanding; one unit was rated excellent; and one unit was rated satisfactory.

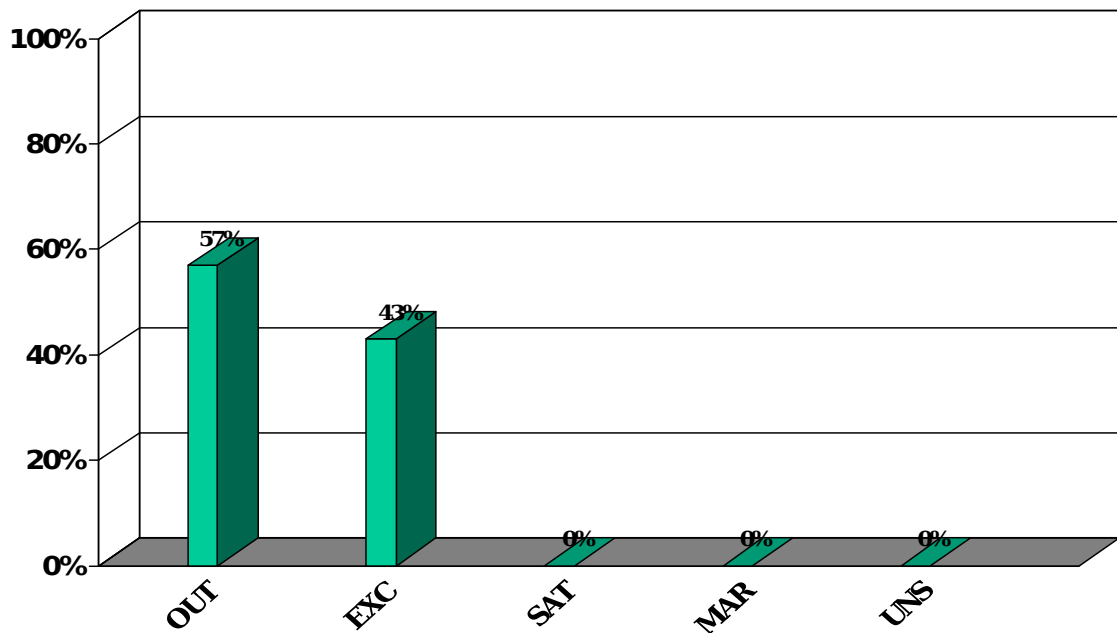
FIGHTER COMMAND POST



Outstanding Ratings: Coordination and job knowledge were the keys for success. The Supervisor of Flying, Fighter Duty Officer and Command Post Controllers worked together to monitor the mission and coordinate with external agencies. Controllers correctly accomplished entry control validation, voice reporting, authentication, and aircraft posturing. Checklists were color-coded for ease of use, enhancing time critical actions. Thorough and detailed event logs were

3.2. Fighter Supervisor of Flying (SOF)/Commander Responsibility. These percentages were based on 7 AFEs. Four units were rated outstanding and three units were rated excellent. One unit was not rated.

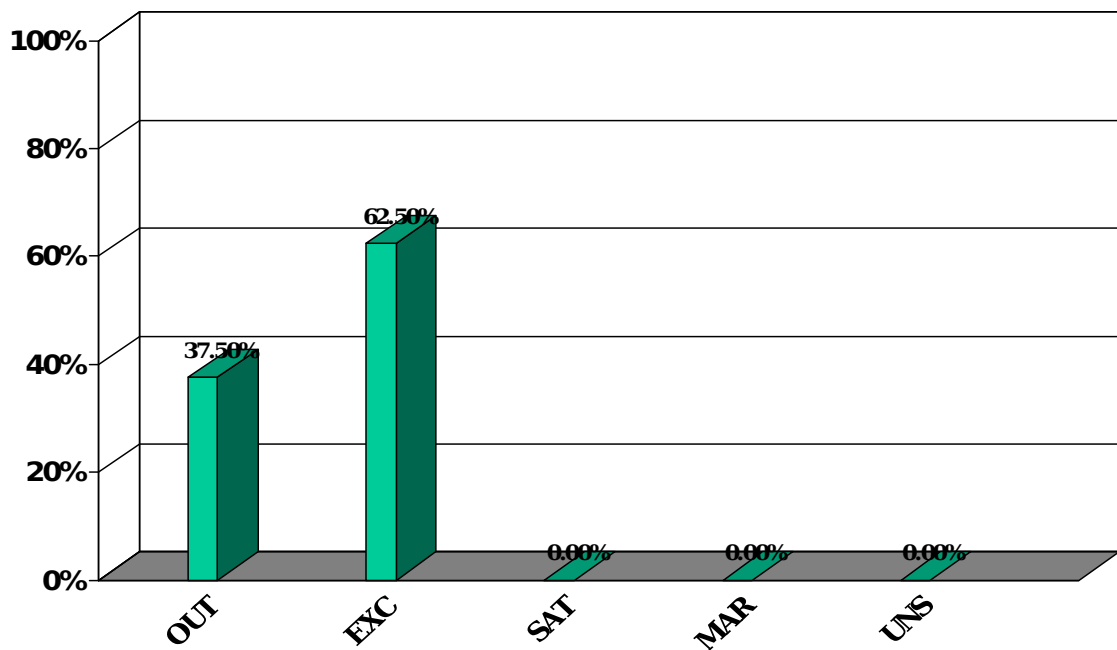
SOF/CMDR RESPONSIBILITY



Outstanding Ratings: Performance was highlighted by cohesive teamwork. Commanders, Supervisors of Flying, Intelligence Officers, and additional pilots all contributed to superb situational awareness by working together to stay “out-in-front” of mission events. Situation briefings included airfield status, weather, divert bases, tanker availability, intelligence updates, target profiles, and communications procedures. Frequent mission updates kept the SOF/Commander in the loop from takeoff to landing.

3.3. Fighter Security. These percentages were based on 8 AFEs. Three units were rated outstanding and five units were rated excellent.

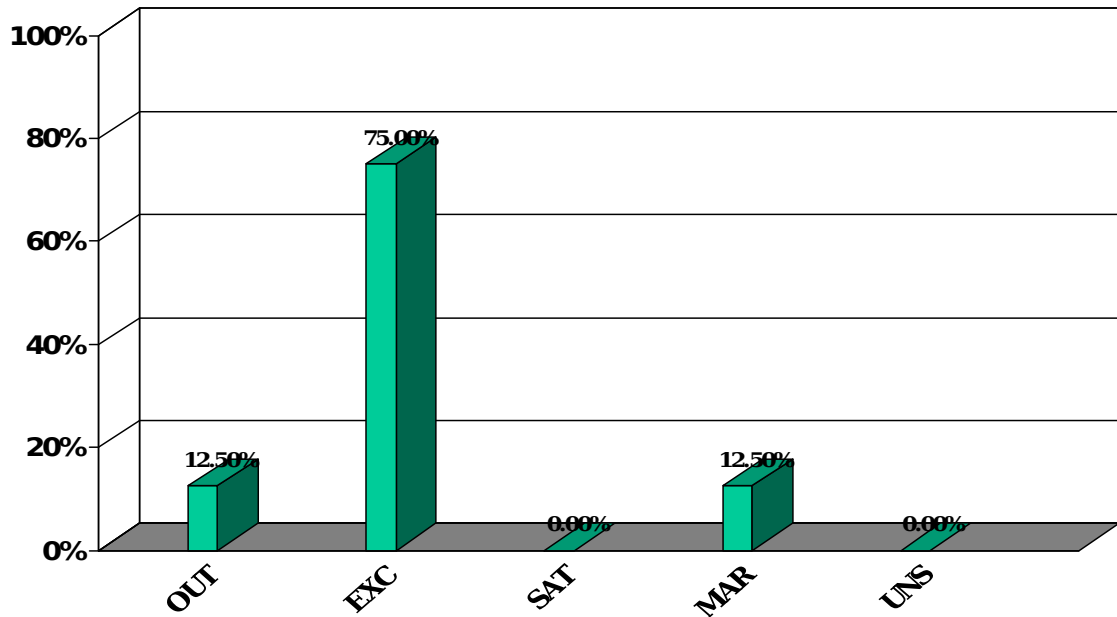
FIGHTER SECURITY



Outstanding Ratings: Unit personnel demonstrated superb knowledge and strict adherence to operations communications, and physical security. Open line procedures, sensitive information, and safe security were closely monitored at all times. Entry Control Points (ECPs) were strictly adhered to at base/flight line ECPS and Command Posts. Security personnel ensured area badges were properly displayed while inside restricted areas.

4.0. Fighter Employment - Overall. These percentages were based on 8 AFEs. One unit was rated outstanding; six units were rated excellent; and one unit was rated marginal.

FIGHTER EMPLOYMENT

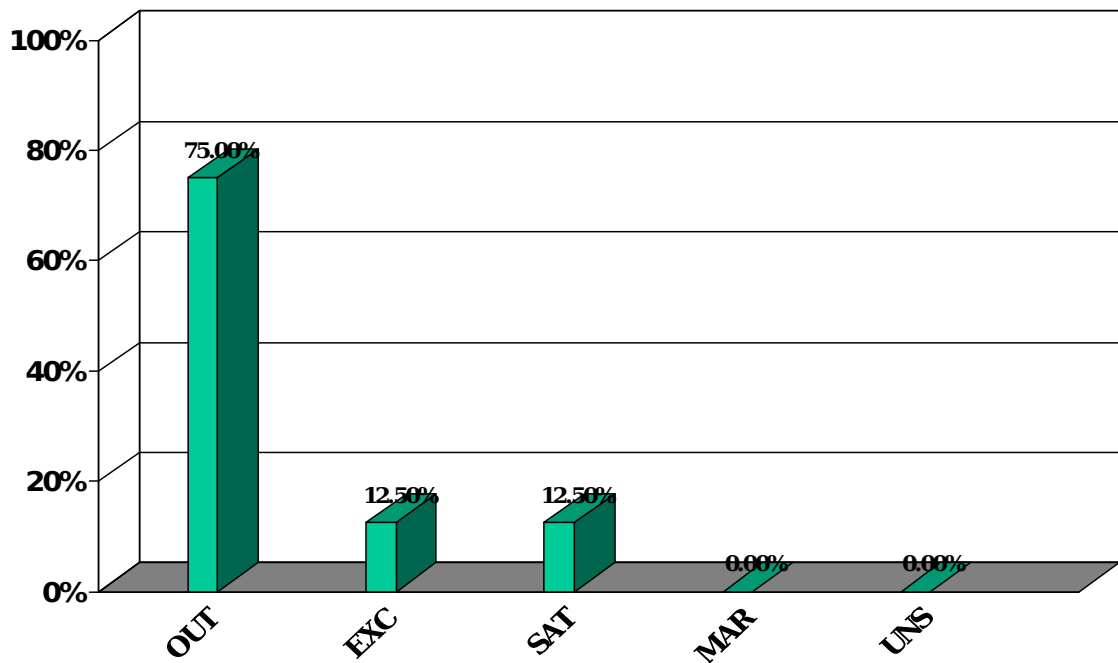


Outstanding Rating: Superb teamwork between the flight lead/wingman, and control agencies contributed to the outstanding rating. Radar and visual monitoring of the target while maintaining a covert position was noteworthy. The wingman expertly performed “secretary duties” by recording the time for all significant target maneuvers and events. Information flow from the fighters to control agencies ensured positive situational awareness. Following the target’s landing, the fighters continued to monitor in an effort to provide additional information to law enforcement agencies.

Marginal Rating: The lack of accurate radar data from the sector combined with poor CF-18 radar search technique, led to a missed intercept.

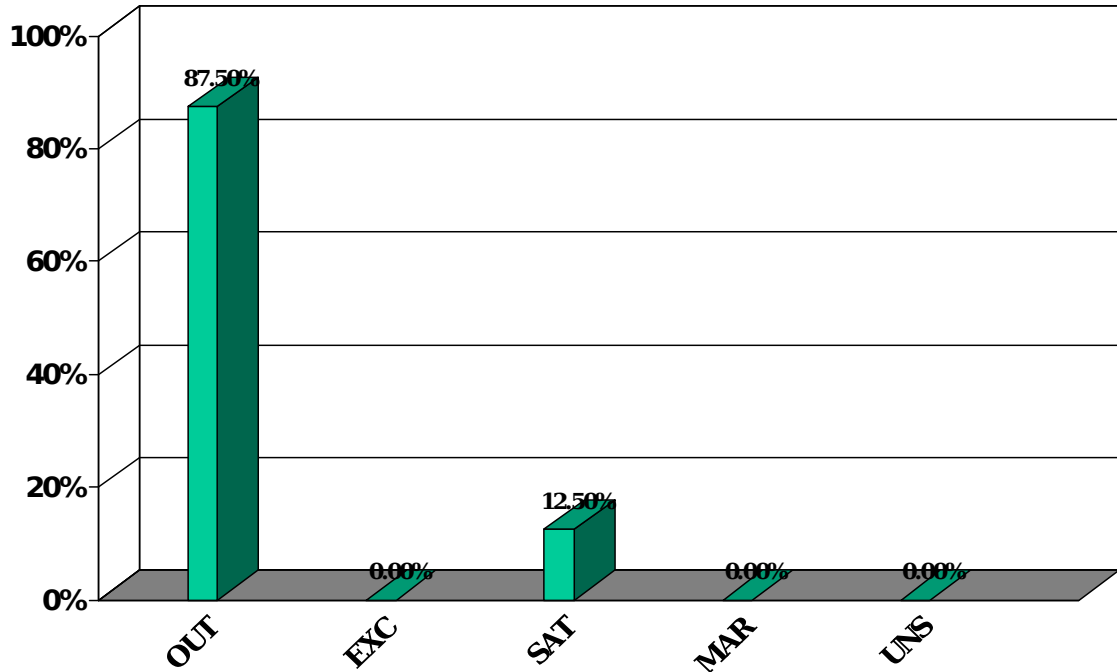
5.0. Alert Aircraft - Overall. These percentages were based on 8 AFEs. Six units were rated outstanding; one unit was rated excellent; and one unit was rated satisfactory. Highlights in this major area are discussed in the specific sub-area.

ALERT AIRCRAFT



5.1. Alert Aircraft Turnaround. These percentages were based on 8 AFEs. Seven units were rated outstanding and one unit was rated satisfactory.

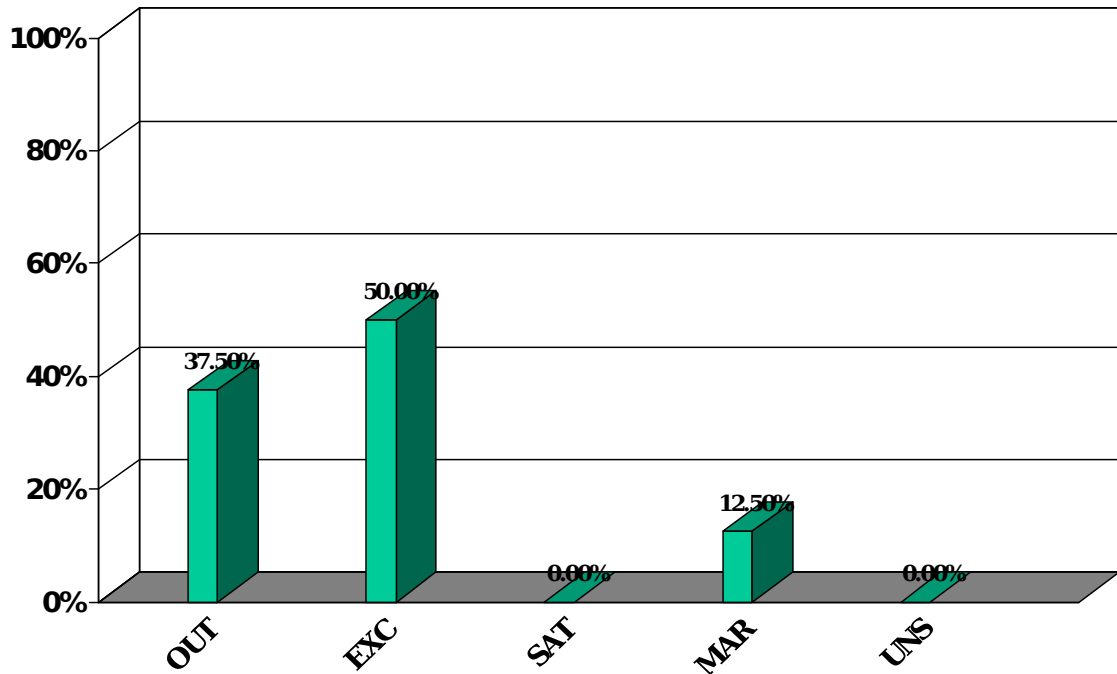
ALERT AIRCRAFT TURNAROUND



Outstanding Ratings: Supervisory involvement and communications between all maintenance levels was exceptional during these evaluations. Maintenance crews were highly motivated, displayed superb teamwork, and demonstrated in-depth systems knowledge. Personal protective equipment was used throughout the evaluation. Shift supervision conducted pre-task safety briefings prior to aircraft recovery. Tool kit accountability and FOD awareness were exceptional.

5.2. Quality of Alert Aircraft. These percentages were based on 8 AFEs. Three units were rated outstanding; four units were rated excellent; and one unit was rated marginal.

QUALITY OF ALERT AIRCRAFT



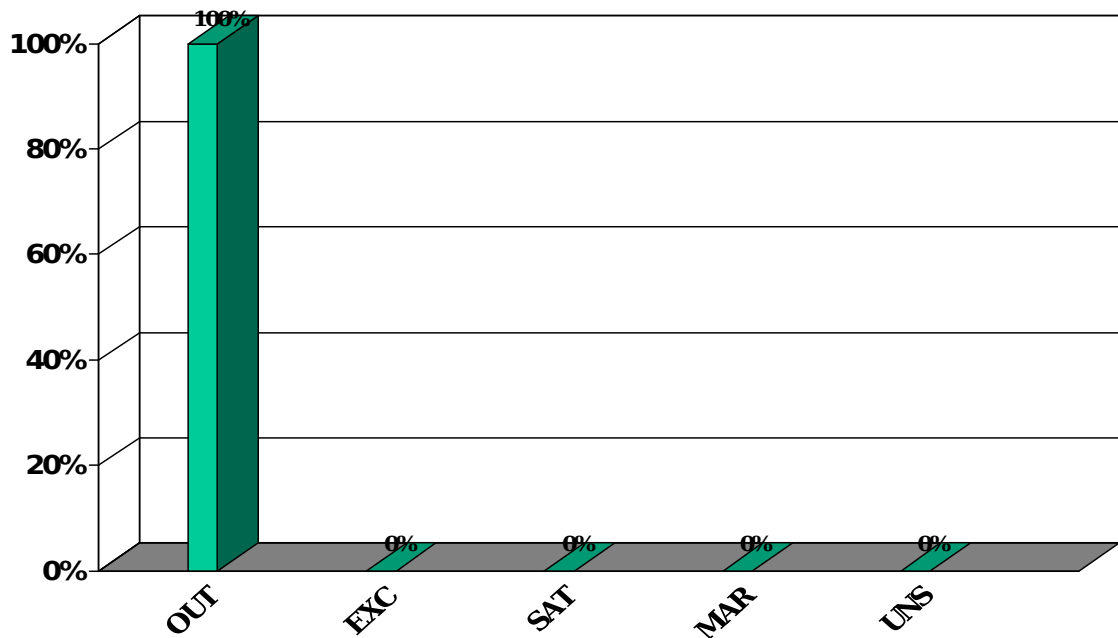
Outstanding Ratings: Involved supervision, attention to detail and superb technical order compliance were evident. Aircraft forms were error-free, neat, and accurately reflected aircraft status.

Marginal Rating: This rating was based on failure to detect a Red X condition (missing rivet head from AOA indexer light assembly). Since this condition was not previously noted or documented, it was possible the rivet head was loose in the cockpit. The aircraft was placed on a Red X and removed from alert.

5.3. Aircraft and Weapons System

Reliability. These percentages were based on 7 AFEs. Seven units were rated outstanding and one unit was not rated.

A/C WEAPONS RELIABILITY

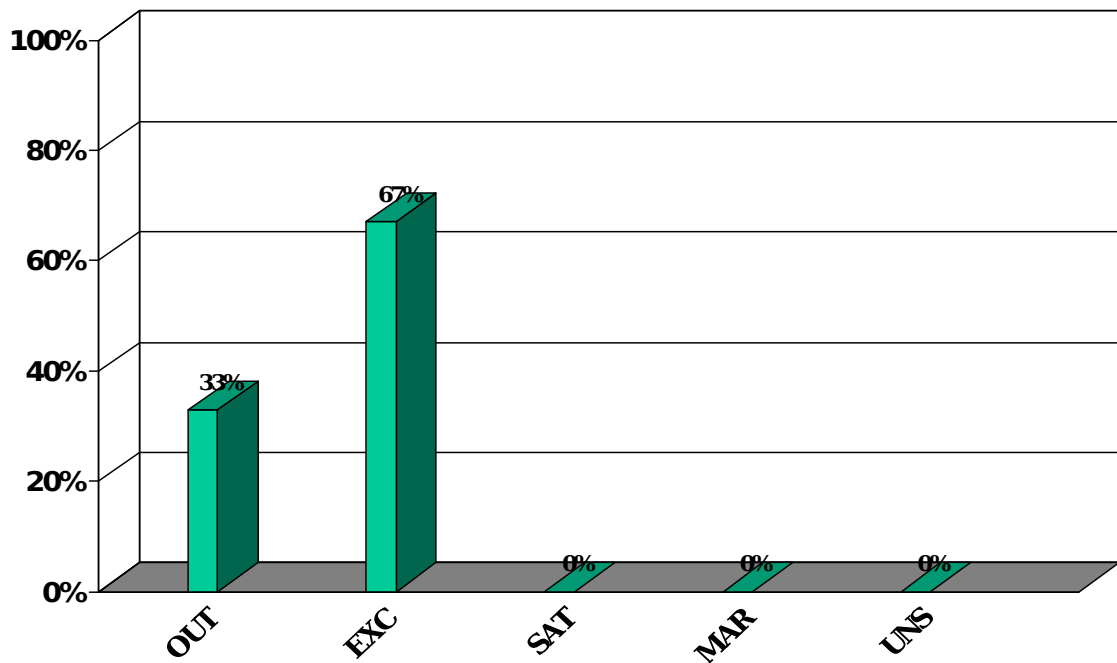


Outstanding Ratings: All missile, gun and radar systems passed operational checks successfully (100%). Superior systems knowledge and keen safety awareness contributed to the outstanding ratings.

Section B - Alert Force Evaluations (ADS or Equivalent)

1.0. ADS Ratings - Overall. This rating distribution chart and similarly formatted ones depict percentages of units receiving each grade. These percentages were based on 3 AFEs. One unit was rated outstanding and two units were rated excellent.

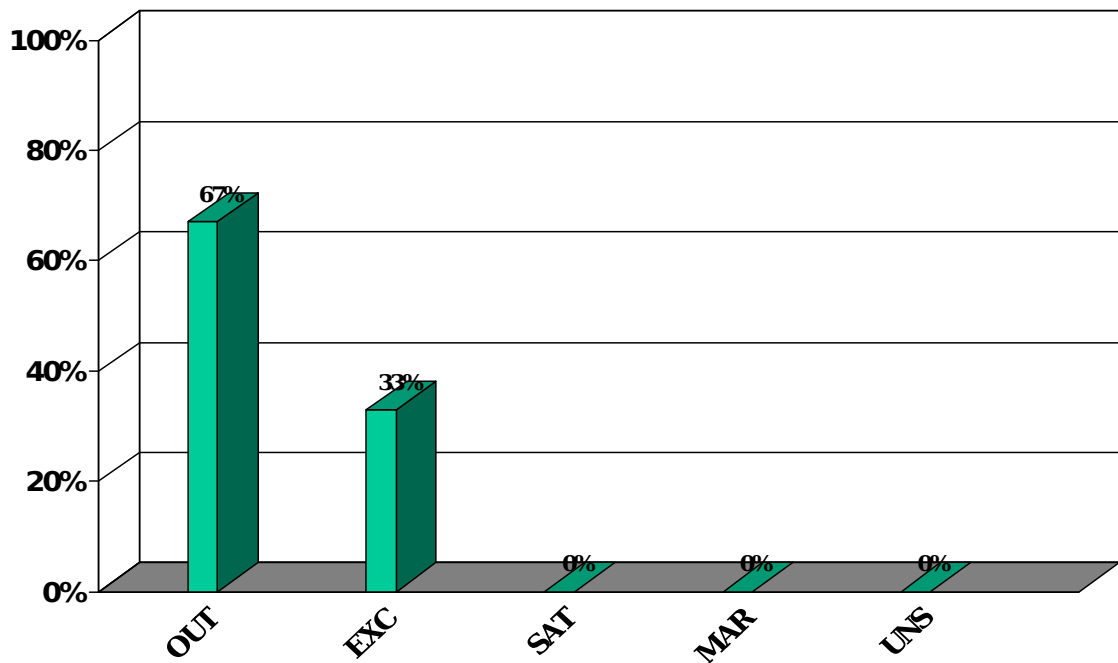
OVERALL ADS RATINGS



Outstanding Rating: Remarks for the outstanding unit rating are highlighted in the specific major areas and sub-areas.

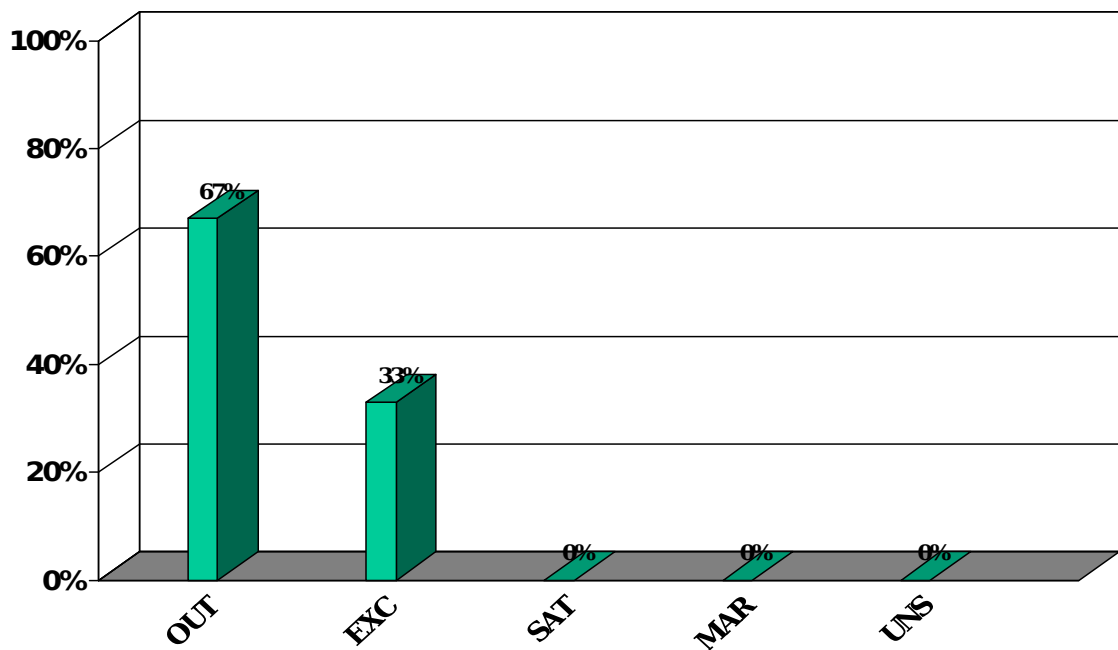
2.0. ADS Initial Response - Overall. These percentages were based on 3 AFEs. Two units were rated outstanding and one unit was rated excellent. Highlights for the outstanding ratings in this major area are discussed in the specific sub-areas.

ADS INITIAL RESPONSE



2.1. ADS Track Detection/ID. These percentages were based on 3 AFEs. Two units were rated outstanding and one unit was rated excellent.

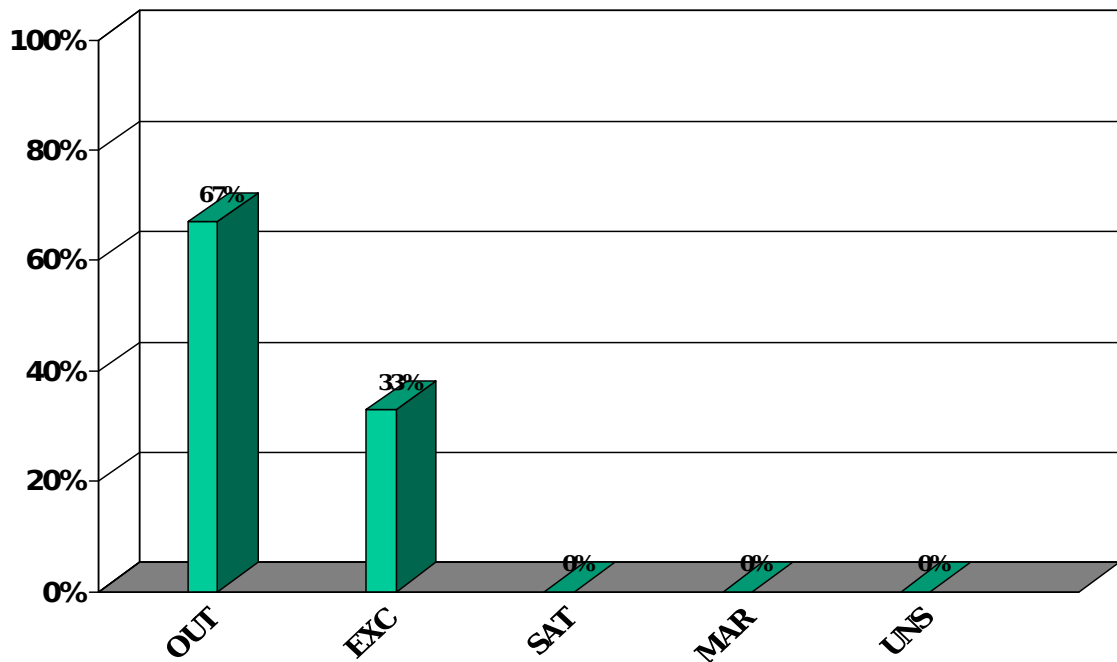
ADS TRACK DETECTION/ID



Outstanding Ratings: Highly motivated group of professionals, exceptional situational awareness, checklist discipline, timely and accurate information flow, and proactive leadership all contributed to the outstanding ratings. Again, teamwork was the key for success. Superlative coordination between surveillance, identification, and weapons sections provided sound solutions to counterdrug and in-flight emergency evaluation scenarios.

2.2. ADS Tactical Action. These percentages were based on 3 AFEs. Two units were rated outstanding and one unit was rated excellent.

ADS TACTICAL ACTION

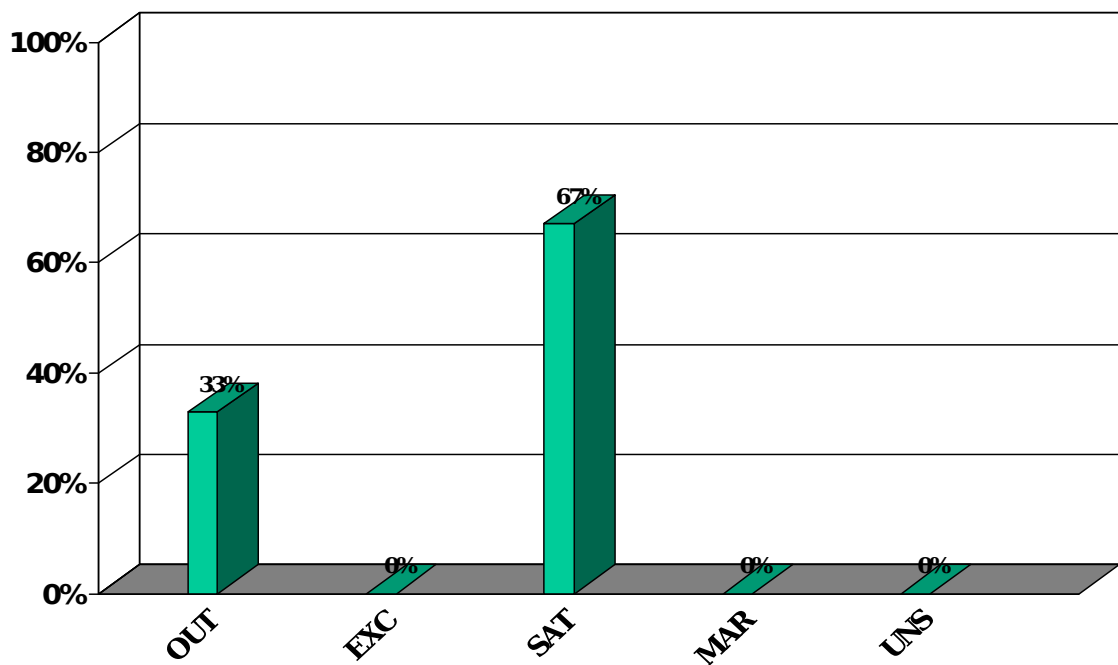


Outstanding Ratings: During one evaluation scenario the Mission Crew Commander (MCC) initiated a secure internal conference call with each operations section, providing a comprehensive mission briefing. As the scenario progressed the MCC and technician implemented classification checklists to ensure directed actions and coordination steps were accomplished accurately. Overall, coordination between leadership positions (DO, MCC, and SD) was superb and ensured quick and rapid responses to the evaluation scenarios.

3.0. ADS Command and Control - Overall.

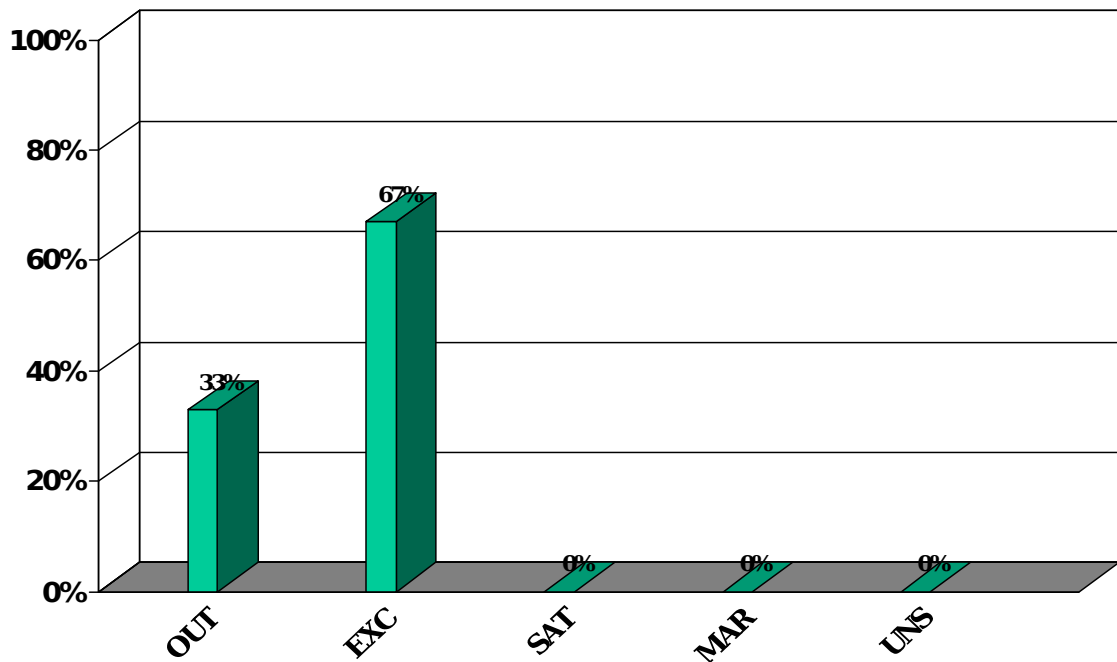
These percentages were based on 3 AFEs. One unit was rated outstanding and two units were rated satisfactory. Highlights are discussed in the specific sub-areas.

ADS COMMAND & CONTROL



3.1. ADS Coordination. These percentages were based on 3 AFEs. One unit was rated outstanding and two units were rated excellent.

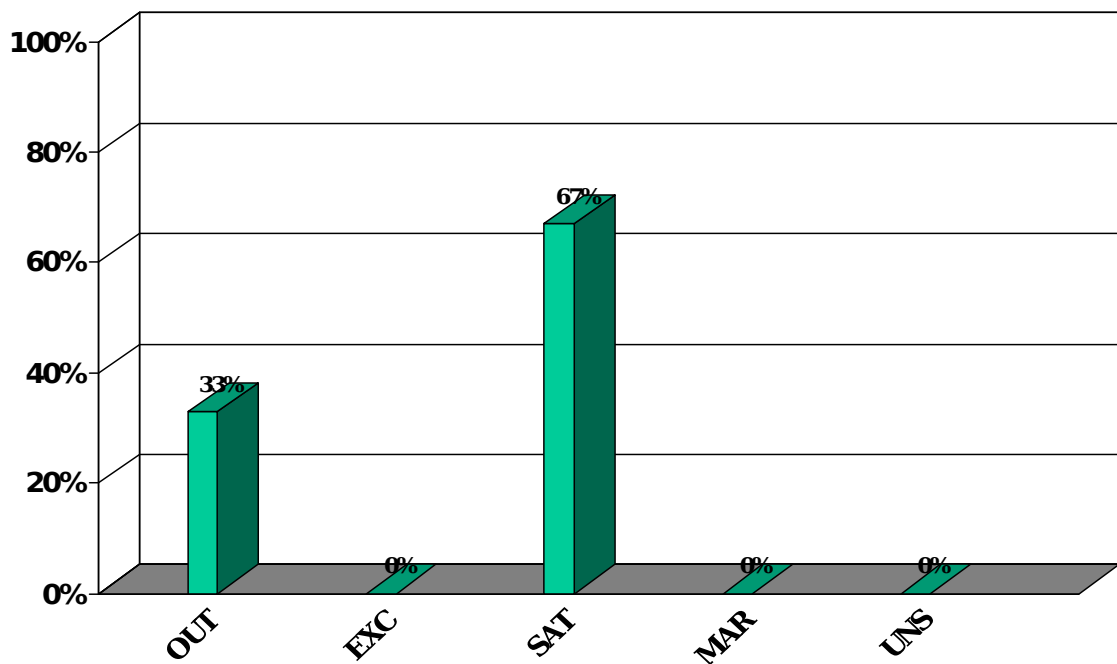
ADS COORDINATION



Outstanding Rating: Sector personnel demonstrated exceptional teamwork throughout the evaluation. Personnel were extremely proactive in providing a continuous flow of information internally between sections and with appropriate external agencies. A second MCC was used to provide higher headquarters with continuous updates by using the NGCCS “chat” feature. The Weapons Director Technicians coordination concerning target altitude deconfliction, airspace extensions/activation's and handoff

3.2. ADS Reporting Procedures. These percentages were based on 3 AFEs. One unit was rated outstanding and two units were rated satisfactory.

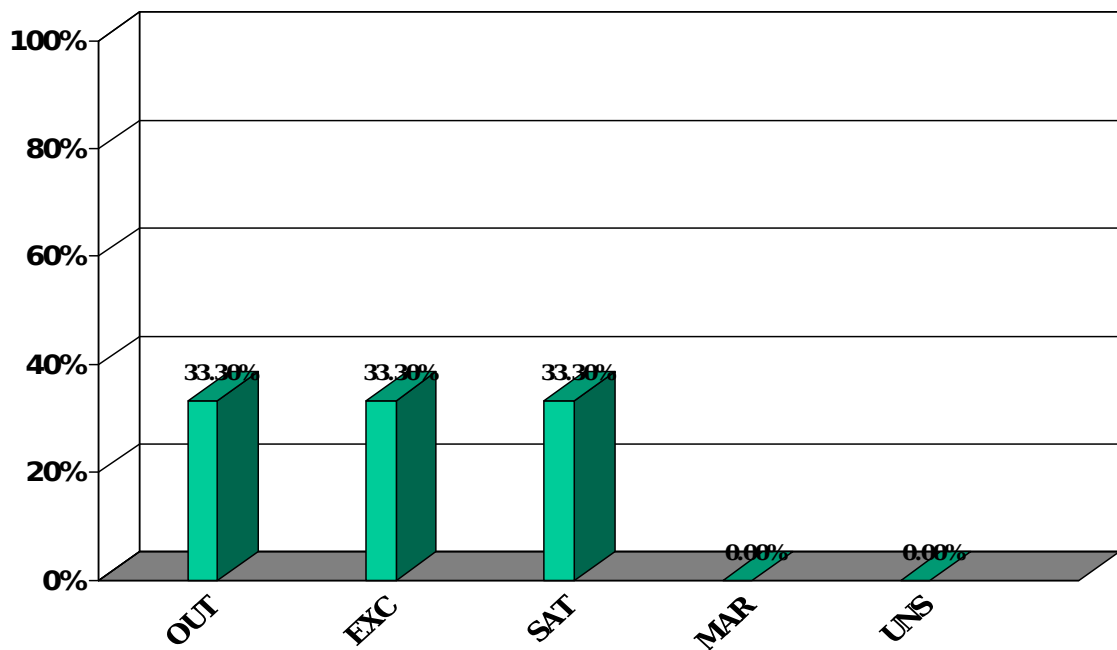
ADS REPORTING PROCEDURES



Outstanding Rating: The outstanding rating was based on timely, accurate, and flawless reporting of OPREP-3s and forward tell traffic. Knowing that the NGCCS' Common Operational Picture link between the region and sector was inoperative, an alternate arrangement for placing targets of interest into the system was coordinated and successfully accomplished with and through an adjacent sector.

3.3. ADS Security. These percentages were based on 3 AFEs. One unit was rated outstanding; one unit was rated excellent; and one unit was rated satisfactory.

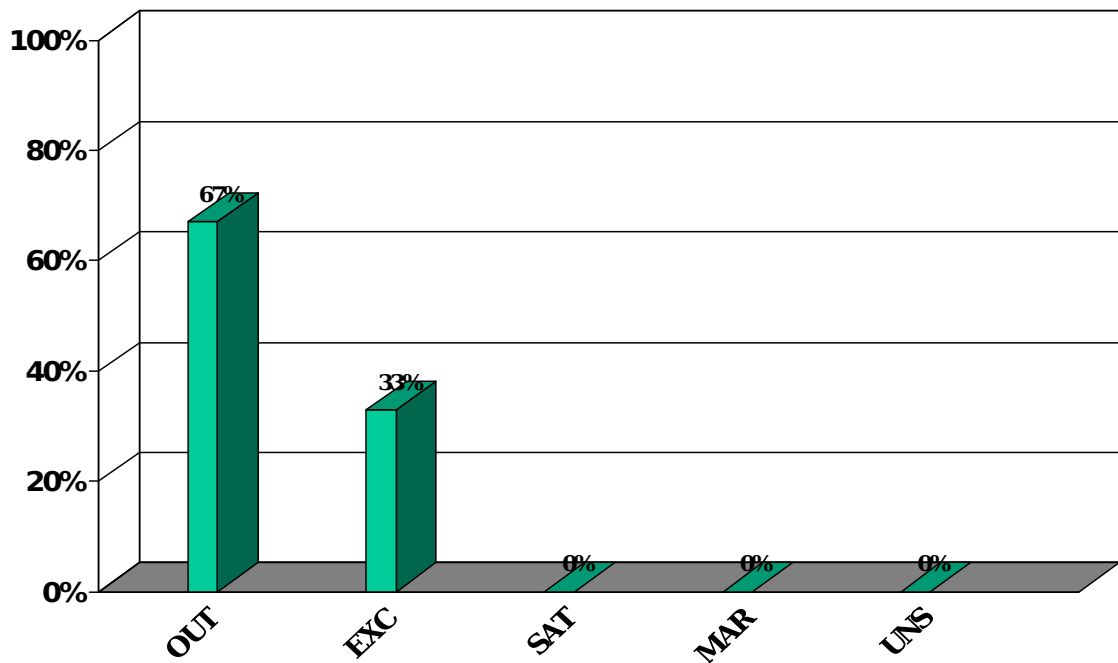
ADS SECURITY



Outstanding Rating: The Entry Access List and IG team credentials were promptly and professionally validated with established entry access procedures. OPSEC/COMSEC was vigorously observed and practiced, as was locally established “open line” procedures. Overall, throughout all operations sections, there was a vigilant attitude with regards to security.

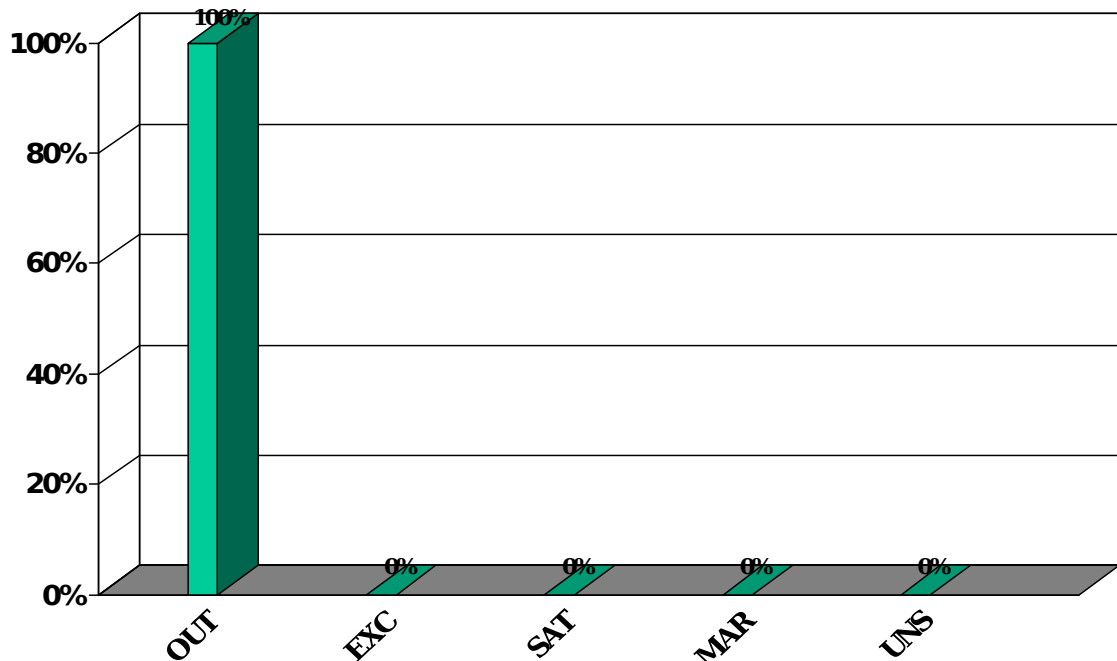
4.0. ADS Employment - Overall. These percentages were based on 3 AFEs. Two units were rated outstanding and one unit was rated excellent. Highlights are discussed in the specific sub-areas.

ADS EMPLOYMENT



4.1. ADS Management and Direction. These percentages were based on 3 AFEs. All three units were rated outstanding.

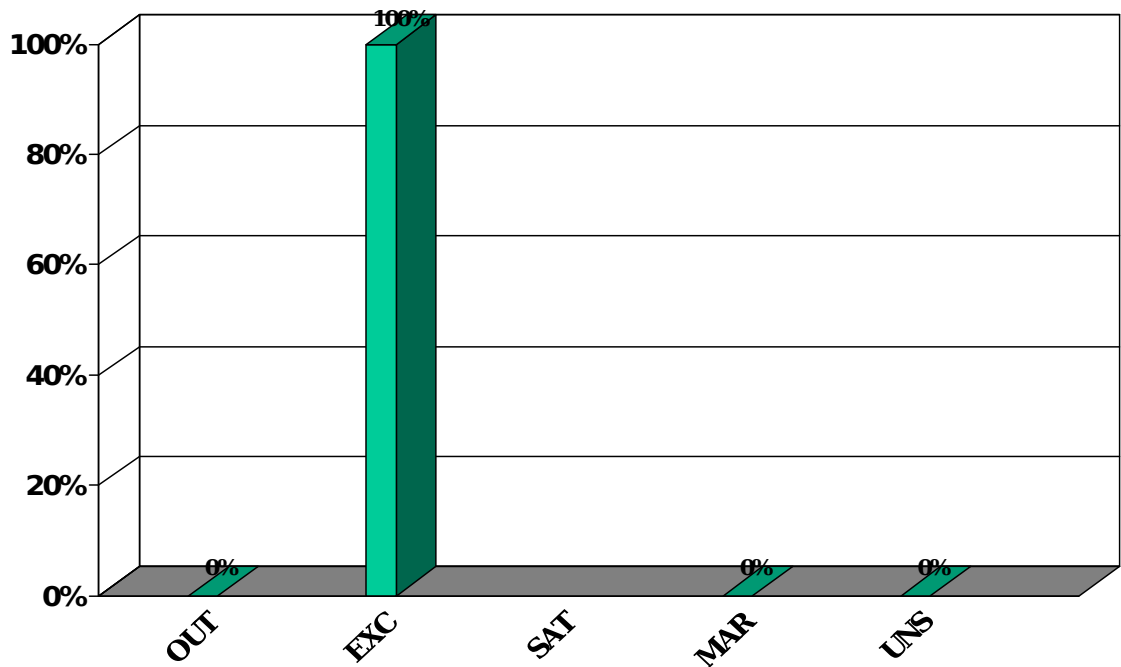
ADS MANAGEMENT & DIRECTION



Outstanding Ratings: Command and Control teams made up of Directors of Operations, Mission Crew Commanders(MCC), Fighter Officers, and Senior Directors clearly demonstrated exceptional leadership and expert knowledge of operational procedures. The use of additional personnel in the MCC, ID, and weapons sections was prominent and extraordinarily effective. Situational awareness briefings that included communications and maintenance personnel were timely and comprehensive. Personnel clearly demonstrated firm control and a solid

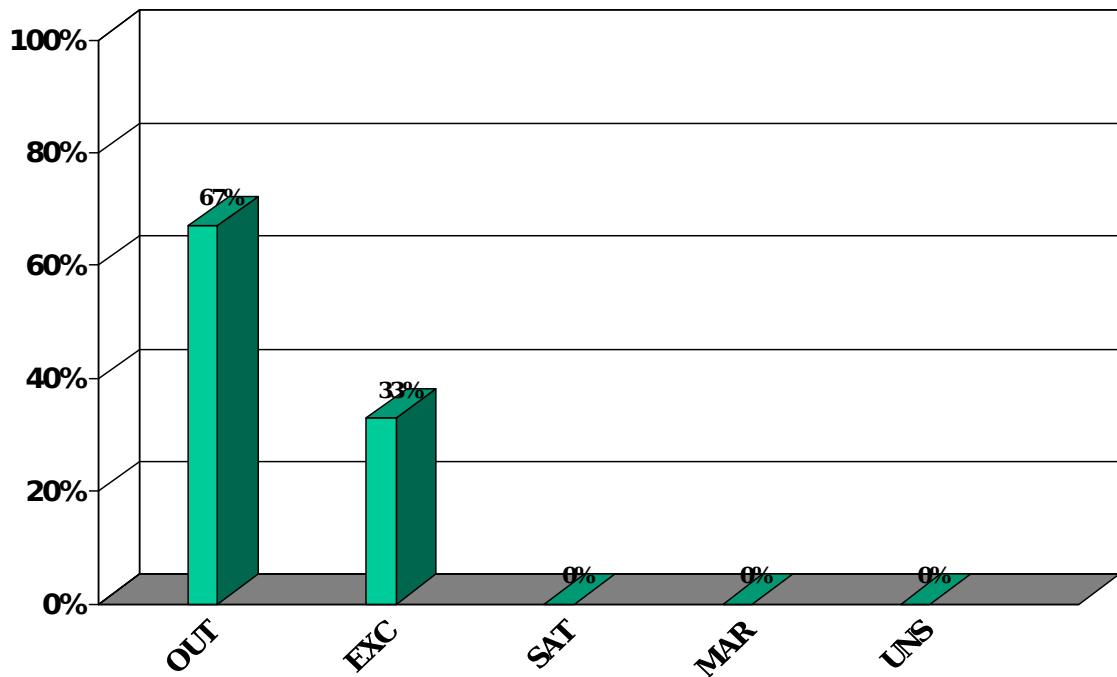
4.2. ADS Intercept Phase. These percentages were based on 3 AFEs. Three units were rated excellent.

ADS INTERCEPT PHASE



4.3. ADS Post Intercept Phase. These percentages were based on 3 AFEs. Two units were rated outstanding and one unit was rated excellent.

ADS POST INTERCEPT PHASE



Outstanding Ratings: Situational awareness and flight safety were of the utmost concern to the weapons sections. Positional redundancy allowed the primary Senior Director to fully concentrate on evolving mission dynamics. Accurate, timely, and detailed information was passed between the fighters and weapons teams. This flow of information contributed significantly to the overall success of the missions. Hand over procedures were well thought out and flawlessly executed.

Section C - NORAD Operational Evaluation (NOE) (Region Air Operations Center (RAOC)

This NOE focused on the regions ability to execute its mission. Live and simulated air events tested implementation of rules of engagement in peacetime, transition, and wartime, with emphasis on CINCNORAD CONPLAN 3310-96, Change 1. The following remarks highlight outstanding, best practice, and finding comments. There were no marginal or unsatisfactory ratings.

1.0. RAOC Overall Rating: OUTSTANDING

1.1. Battle Staff Overall Rating: OUTSTANDING.

1.1.1. Battle Staff Command and Control: OUTSTANDING. Remarks are highlighted in the specific major area or sub-area.

1.1.1.1. Battle Staff Leadership and Management: OUTSTANDING

Senior leadership displayed an extensive knowledge and understanding of NORAD and CONR CONPLANS, command directives, and CINCNORAD verbal guidance. The JFACC provided clear and focused guidance allowing quick and efficient actions from the RAOC staff and sector commanders. Extremely efficient flow of information to and from the AOC Director and Battle Staff provided timely and concise information updates.

1.1.3. Emergency Action Message (EAM)

BEST PRACTICE: Quick reaction message and voice emergency action (EA) checklists and procedures were exemplary. QRM and voice EA checklists were functionally organized, detailed, current, and easy to follow. Checklist simplicity ensured accurate and timely dissemination of information enhancing overall controller proficiency. The RAOC QRM and voice EA checklist should be the command standard. POC for this issue is CONR/A3, DSN 523-5433.

FINDING: AOC EA Controllers failed to comply with NI 10-4, Emergency Message Action Procedures (EAP), Chapter 2, paragraph 2-2.

AUTODIN(record copy) EAM transmission and validation was not accomplished. EA Controllers failed to transmit and validate required record copy EAM's. POC for this issue is CONR/A3, DSN 523-5433.

1.1.1.4. Contingency and Continuity of Operations: OUTSTANDING.

BEST PRACTICE: CONR's recent development of an Air Operations Center (AOC) and realignment to an "A" staff structure is extremely functional and effective. This "A" Staff structure includes special teams such as Space Liaison and Air Defense Artillery Liaison. These teams provide CONR commander with all the expertise needed to conduct AOC operations. During the Course of Action (COA) development phase, every element of the "A" staff team participated in the process. This team concept, which also included inputs from the sector staff, ensured every possible aspect of the COA development process was carefully and realistically considered. The COA development involved a considerable degree of brainstorming, extensive discussion, proposal validation and confirmation, which ensured the COA proposal(s) were within the context of CINCNORAD's intent. POC for this issue is CONR/A3, DSN 523-5433.

1.1.2. Response to Air Events/ROE Problems: OUTSTANDING.

The JFACC, AOC Director, and battle staff skillfully responded to dynamic

1.1.2.3. Fighter/Tanker Management: OUTSTANDING.

Exceptional training and familiarization with NORAD Instructions resulted in effective management of fighter and tanker resources. Superior communication with sectors was enhanced by the use of chat features and e-mail. Utilizing these functions, FOs were able to give timely, accurate information to the AOCD and JFACC concerning status of fighter operations. FO skill with electronic media allowed them to quickly disseminate JFACC guidance to sectors. Air sovereignty guidance, threat prosecution, and aircraft survivability orders were expeditiously passed from the JFACC to units. FO attention to detail when updating manual tracking boards resulted in an accurate depiction of fighter and tanker assets when it became necessary to exit the AOC and reconstitute at the alternate location.

1.1.2.4. E-3/Ground Sensor/ ADA Management: OUTSTANDING.

The Command and Control Officer (C2O) and assistant immediately assessed critical JSS radar outages and coordinated appropriate and timely replacement actions. The C2O expertly managed and directed relocation of Ground Mobile Radar's, FAA ASRS-3 radar's, U.S. Customs P-3s, and joint AEW assets to fill designated gaps in CONR radar coverage. The exceptional situational awareness and flexibility of the C2O and assistant ensured maximum operational sustainability for CONR's low density/high demand C2 resources.

1.1.2.5. Communications/Electronic Systems Management: OUTSTANDING.

The Communication-Computer Systems Officer's (CSO) exemplary use of network chat lines provided flawless, and near-real-time reporting of C4I, JSSO, TARS, and GMR deployment systems status. Comm/Electronic systems were used to rapidly update Battle Staff situational displays and to keep the Battle Staff keenly aware of all networks, transmission systems, HF/VHF/UHF communications switch systems, intelligence systems, and technical control outages/estimated time of return to operations. In addition, the well-planned secure video teleconferences were an invaluable senior staff command and control decision-making tool.

1.1.2.6. Intelligence Support: OUTSTANDING.

The A2 Staff provided an exceptional level of support to the JFACC and Battle Staff (BS). The A2 ensured that information flow was constant and accurate, so the JFACC and BS were consistently aware of enemy capabilities and perceived intentions. Moreover, the A2 Staff was highly responsive to any and all JFACC and BS queries.

1.1.3. Information Flow: OUTSTANDING.

1.1.3.1. Internal Information Flow: OUTSTANDING.

The no-holds-barred exploitation of computer based information permitted relevant information to rapidly flow from top to bottom and back up again resulting in minimal meeting, informed decision-making at all levels, and a significantly quieter work environment. Information was presented to key players through an efficient meeting schedule and rock solid briefing format and presentation. In turn, key players immediately disseminated information

In addition, the use of liaison officers in key positions (i.e. space, air defense artillery, and legal) greatly enhanced CONR's ability to coordinate with external agencies not contacted on a regular basis. The near-real-time exchange of information between all functional areas and commands, coupled with the expertise provided by LOs, facilitated the efficient flow of information to decision-makers.

BEST PRACTICE: Adaptation of technical information tools such as Xircon chat, classified e-mail, web browser and Message Distribution System etc. , very effectively meets both internal and external information needs of the AOC. Within the AOC, this resulted in a near-real-time information flow to appropriate functional areas and an essentially paperless operation. It also significantly decreased telephone use, thereby reducing noise in a crowded work environment, and reduced the potential for classified Battle Staff conversations being picked up by open unclassified phone lines. In addition, manually updated status boards backed up these technical tools. External to CONR, this technology information kept HQ NORAD, ANR, CANR, and CONR's sectors informed of CONR's current status and permitted near-real-time coordination for both long and short term planning considerations. This near-real-time coordination also supported efforts to eliminate seams between region and sector operations. Overall, this exemplary use of information technology was a BEST PRACTICE by the region. POC for this issue is CONR/A6, DSN 523-2743.

1.1.4.2. Command and Control Transfer: FINDING.

The HQ NORAD staff has failed to delineate responsibilities, expectations, and duties for the region commander and his staff when assuming CINCNORAD and NORAD battle staff responsibilities during contingency. CINCNORAD CONPLAN 3310-96, Change 1, Appendix 11 to Annex C and NI 36-22 discuss the situations and the succession of command line-up. These documents though, do not specify what actions are expected if a region commander is forced to perform CINCNORAD/command group duties. CJCS Emergency Action Procedures Vol VI, discusses crisis action reporting such as Air Threat and Air Event Conferences. Region commanders are not trained in these procedures nor do they have Volume VI. Other EAP conferences that could have been conducted were: Nuclear Flash Conference and Significant Event Conference. POC for this issue is HQ NORAD J3/J5.

1.1.4.3. Survivability: OUTSTANDING.

Timely use of all available information and the aggressive guidance directing the sectors to initiate FLUSH procedures ensured forces would survive attacks. The synergistic effect of ensuring all EW assets were considered to provide attack warning, combined with a realistic plan to allocate assets to critical areas, enhanced warning capabilities and survivability. This added capability allowed the JFACC to efficiently direct sectors to initiate FLUSH action when needed and recall forces when conditions warranted. Rolling FLUSH orders for units based on predicted impact times ensured units were flushed when required, while ensuring unnecessary flushes were avoided. This practice showed an exceedingly

1.2.1. Management and Direction: BEST PRACTICE.

During evacuation/relocation from the RAOC to the alternate site, the staff demonstrated 100% accountability of personnel and functionality using both a physical role call and STU-III key accountability. Superb exploitation of technology for command and control and information flow, while retaining the capability to function in an austere environment, was clearly demonstrated. These capabilities and procedures should be adopted by all NORAD elements, including higher headquarters. POC for this issue is CONR/A3, DSN 523-5433.

1.2.1.1. Logistics Management: OUTSTANDING.

Logistics Readiness Center (LRC) personnel were highly successful in their Global Command and Control System Joint Operational Planning and Execution System operations. They superbly completed initial data manipulation to update the evaluation Time-Phased Force Deployment Data listing by accessing the initial forces list, correcting all deficiencies, and providing it to the BS. This resulted in the capability to operate in a contingency using the standard DoD planning and execution system and brought realism to the evaluation.

Single point management of all LRC functions allows for hidden trends to be identified and addressed. The “creeping” loss of southeastern radar sites was noticed by the LRC and additional attention was given to the Ground Mobile Radar support needed to fill the gaps.

1.2.1.2. NBC Management: BEST PRACTICE.

The CONR NBC Cell has taken advantage of technology by establishing Points of Interest databases to reflect critical CONR assets. This is an effective and efficient method of ensuring that the commander has accurate information to make informed decisions. Each NORAD region NBC Cell should adapt this concept for their region commanders.

Although the CONR NBC Cell has not been in existence long, they managed the RA program very well by allowing the program to be executed at the sector level rather than centrally controlling it. This allows for a highly effective and efficient system. The NBC Cell has exceeded requirements by producing a video training tape for initial and refresher training purposes. POC for this issue is CONR/A3, DSN 523-5433.

1.2.1.3. Personnel Management: OUTSTANDING.

During the Course of Action (COA) phase, the A1 was very aggressive in providing advice to CONR/CC and the planning staff. His actions ensured all procedural aspects of the Air Force Guard/Reserve call-up system were considered and included in the COA. Had these time sensitive issues not been considered early, they could have had a significant negative impact on operations as personnel requirements increased.

A1 used the same slides to monitor personnel status that A3 used to maintain fighter/tanker/AEW status (i.e. Fighter status sheet becomes Fighter Personnel Status Sheet). The slides could be modified to

1.2.1.3. Personnel Management: BEST PRACTICE.

The Public Affairs Officer has developed his own remarkable quick reaction notebook containing pre-formatted press releases and “command cards.” These superb 3X5 cards have 1-2 line command and Air Force theme statements that he can provide the Commander when making statements to the press. Anyone speaking to the press should have similar cards available. All Public Affairs Officers should have pre-formatted press releases and these command card tailored to their command and mission. POC for this issue is CONR/A1, DSN 523-5433.

1.2.2. Reporting: OUTSTANDING.

The functional areas of the Extended Battle Staff make extensive use of SIPRNet based computer tools for exchanging information to/from the sectors. This provides the capability to constantly monitor status on a near-real-time basis versus the daily or twice-daily method of normal military reporting concepts. This distributed information supports sector expansion and resource cross-flow actions. Especially noteworthy was the LRC Resource Database, which tracked all regional logistics assets.

BEST PRACTICE: The Personnel and Logistics functions demonstrated a clear understanding of their role in the “Joint Task Force” concept of a NORAD Region. They maintained overall situational awareness of their functional areas by “seeing” all the key information from the sectors, but not interfering in the Organize, Train, and Equip functions of the Service agencies. This concept is used extensively by the LRC in tracking the status of all unit aircraft instead of just NORAD-assigned resources. This allows them to determine, before the question is asked, what operational impacts and resource options are available to the Commander. POC for this issue is CONR/A1/A4, DSN 523-3096.

1.3. Air Defense Center Operations: OUTSTANDING.

1.3.1. Initial Response: OUTSTANDING.

The Senior Air Defense Officer (SADO) closely monitored the generation efforts of the subordinate units and kept CONR CC and DO informed of the rapidly changing status. Air Defense Technicians (ADTs) continually updated the JMI and status boards in an exemplary manner. This provided the SADO/Air Defense Director (ADD) and BS with the most current information available for decision making. Superb teamwork between the ADTs, the SADO/ADD, and EACs, coupled with timely coordination with subordinate units, lateral units, and HHQ, ensured the AOC had all pertinent information available to respond to any tasking or contingency. Innovative use of a self-styled event log, by the Flight Superintendent, prevented possible confusion during multiple event scenarios and provided the SADO with a ready-reference to reconstruct events, or provide recommendations to the BS.

1.3.2. Management and Direction: OUTSTANDING.

The SADO, ADD, and ADTs expertly monitored, managed, and controlled assets and forces assigned. The ADC provided clear guidance and direction

1.3.3. Air Defense Center: OUTSTANDING.

Utilization of available assets optimized coverage, provided timely response to all threats and furnished the BS with up-to-the-minute information for aerospace control decisions. Responses to AST and ROE inputs were timely and expertly executed. SADO/ADD closely monitored missions, and assets, and provided clear direction, or recommended courses of actions, when necessary. The ADC team aggressively kept subordinate units, BS, and HHQ apprised of all status and ROE changes.

Relocation to the alternate location was accomplished in less than fifteen minutes, with secure communications established with all concerned agencies. Exemplary efforts were made to establish secondary means of communications utilizing HF, UHF and SATCOM.

2.1. Overview: Areas of Interest

2.2. Air Tasking Order (ATO)

The results of CONR'S complete restructuring were widely evident in its ATO development process. This process is considered a model operation. The CONR process follows NORAD Instruction 10-44, Command and Control (C2) of NORAD Forces, NI 10-44/CONR Sup 1 (Draft), AFI 13-109, Volume 3, Operational Procedures - AOC, and CONR Air Operations Center CONOPS, October 98. The CONR ATO process is organized in accordance with the USAF's new Air Operations Center Instruction and is based on the curriculum of the USAF Battle Staff course taught at Hurlbert Field, Florida.

The CONR ATO process involved inputs from every member of the "A" Staff, as well as inputs from the sectors. The CONR Commander headed a team consisting of an AOC Director, a Strategy Plans Team and Production Team. These teams were composed of members with expertise in all phases of ATO production, from plans to weapons system employment. The CONR ATO process was seen to be a continuous cycle of information sharing, guidance, planning and direction. This cycle flowed from the top to the bottom of the "A" Staff, then back again. During the ATO process, elements of the CONR ATO team were seen to operate seamlessly, and with near-perfect information flow.

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